

ACADEMIC PARTNERS

Calit2 (California Institute for Telecommunications and Information Technology): University of California, San Diego and University of California, Irvine

Northwestern University

San Diego State University

Texas A&M University

University of Southern California, Information Sciences Institute

University of Illinois at Chicago

University of Illinois at Urbana-Champaign, National Center for Supercomputing Applications

AFFILIATE PARTNERS

AIST (National Institute of Advanced Industrial Science and Technology), Japan

CANARIE, Canada

Communications Research Centre Canada (CRC), Canada

KISTI (Korea Institute of Science and Technology Information), Korea

NASA

Purdue University

SARA Computing and Networking Services, The Netherlands

United States Geological Survey, National Center for Earth Resources Observation and Science

University of Michigan

University of Amsterdam, The Netherlands

INDUSTRIAL PARTNERS

Big Bandwidth

Calient Networks

Chiaro Networks

Glimmerglass Networks

IBM

Lucent Technologies

Rincon Research Corporation

Sun Microsystems

Telcordia Technologies

COLLABORATORS

CENIC (Corporation for Education Network Initiatives in California)

CICESE (Centro de Investigación Científica y de Educación Superior de Ensenada), Mexico

CommNexus San Diego

National LambdaRail

OptIPuter @ SC06



*A Powerful Distributed Cyberinfrastructure to Support
Data-Intensive Scientific Research and Collaboration*
www.optiputer.net

The OptIPuter receives major funding from the National Science Foundation, cooperative agreement OCI-0225642 to UCSD.

Theoretical model of deformation in California along the San Andreas fault after the 1906 San Francisco earthquake. Image provided by the SIO Visualization Center at the Institute of Geophysics and Planetary Physics, Scripps Institution of Oceanography (SIO), University of California, San Diego (UCSD).

Exhibition: Academic Partners

APPLE COMPUTER

BOOTH #1834

SAGE/OptiPutter Demonstration

University of Illinois at Chicago (UIC), Electronic Visualization Laboratory (EVL) • University of California, San Diego (UCSD), Calit2, CEOA and Scripps Institution of Oceanography (SIO) • Contact: Atul Nayak <anayak@ucsd.edu>

CALIT2/CEOA

BOOTH #1647

California Institute of Telecommunications and Information Technology (Calit2) and Center for Earth Observation Applications (CEOA) at UCSD

SAGE and Visualcasting Create a Virtual Distributed Laboratory

UIC EVL • with OptiPutter partners and research partners on the show floor – Calit2/CEOA • Purdue • NBCR/Osaka • SARA (Dutch Consortium) • University of Michigan – and remote participation by UIC EVL (Chicago) and possibly Chinese Academy of Sciences' Computer Network Information Center • Contact: Maxine Brown <maxine@uic.edu>

Studies of Gaviota Slide Offshore Southern California and EM Modeling
UCSD SIO • British Petroleum America • Contact: Atul Nayak <anayak@ucsd.edu>

Cyberinfrastructure for Ocean Observing Systems: Laboratory for the Ocean Observatory Knowledge Integration Grid (LOOKING) and the Southern California Coastal Ocean Observing System (SCCOOS)

UCSD Calit2 • UCSD CEOA • Contacts: Matthew Arrott <marrott@ucsd.edu>, Atul Nayak <anayak@ucsd.edu>

3D Interactive Visualization of Heterogeneous Earth Science Datasets
SIO Visualization Center, UCSD SIO • Contact: Debi Kilb <dkilb@ucsd.edu>

Visualizing and Interacting with Protein Data

UCSD Calit2 • Burnham Institute for Medical Research • Contact: Jurgen Schulze <jschulze@ucsd.edu>

Beyond Networks: Integrated Collaborative Cyberinfrastructure

UCSD National Center for Microscopy and Imaging Research (NCMIR) • Contact: Rajvikram Singh <raj@ncmir.ucsd.edu>

The NCMIR Multiscale Imaging Portal

UCSD NCMIR • Contact: Rajvikram Singh <raj@ncmir.ucsd.edu>

GULF COAST ACADEMIC SUPERCOMPUTING

BOOTH #1825

Gulf Coast Academic Supercomputing is an alliance of Rice University, Texas A&M University (TAMU), and University of Houston

Prophecy (poster)

Texas A&M University (TAMU) • Contact: Xingfu Wu <wuxf@cs.tamu.edu>

Processor Partitioning-based Performance Analysis and Optimization Framework (poster)

TAMU • Contact: Xingfu Wu <wuxf@cs.tamu.edu>

Performance Analysis, Modeling and Prediction of a Parallel Lattice Boltzmann Application Using Prophecy (poster)

TAMU • Contact: Xingfu Wu <wuxf@cs.tamu.edu>

NATIONAL CENTER FOR DATA MINING

BOOTH #1428

Transporting Sloan Digital Sky Survey (SDSS) Data using SECTOR

UIC National Center for Data Mining (NCDM) • Northwestern University (NU) International Center for Advanced Internet Research (iCAIR) • Johns Hopkins University • JGN2 • KISTI/GLORIAD • SARA • SURFnet • StarLight • NASA Goddard Space Flight Center (GSFC) • Caltech • Contact: Robert Grossman <grossman@uic.edu>

NATIONAL LAMBDARAIL

BOOTH #1951

OptiPutter Technologies Enable Genomic and Oceanographic Research (presentation) • Larry Smarr, UCSD Calit2

Global Lambda Visualization Facility and SAGE Visualcasting

(presentation) • Jason Leigh, UIC EVL <spiff@uic.edu>

TransLight and GLIF (presentation) • Maxine Brown, UIC EVL <maxine@uic.edu>

NORTEL

BOOTH #1643

International Dynamic Optical Multicast

NU iCAIR • Nortel • Louisiana State University • Masaryk University (Czech Republic) • Louisiana Optical Network Initiative (LONI) • CESnet • MCNC • SURFnet • CA*net 4 • StarLight • National LambdaRail • Atlantic Wave • Contact: Joe Mambretti <j-mambretti@northwestern.edu>

Exhibition: Affiliate Partners and Friends

AIST

BOOTH #325

G-lambda Project: Inter-Domain Advance Reservation of Bandwidth and Computing Resources

AIST (National Institute of Advanced Industrial Science and Technology), Grid Technology Research Center (GTRC) • Contact: Tomohiro Kudoh <t.kudoh@aist.go.jp>

GEO Grid: Motivations and Opportunities for Earth Observation Grids

(presentation) – *Demonstration in the NBCR-Osaka booths #439-443*

AIST GTRC • Contact: Ryosuke Nakamura <r.nakamura@aist.go.jp>

DUTCH RESEARCH CONSORTIUM

BOOTH #1805

Visualizing a 50-Terabyte Climate Study using the OptiPutter

SARA High Performance Networking & Insight Services Group • University of Utrecht • Contact: Paul Wielinga <wielinga@sara.nl>

Token-based GMPLS: Path Authorization and Resource Management by extending RSVP-TE with Tokens

Universiteit van Amsterdam (UvA), Advanced Internet Research Group • UvA System and Network Engineering Research (SNER) Group • Contact: Cees de Laat <delaat@science.uva.nl>

Using the RDF-based Network Description Language to Describe Network Resources in the GLIF for Pathfinding

UvA SNER • SARA • Contact: Cees de Laat <delaat@science.uva.nl>

StarPlane: Enable Applications to Dynamically Manage and Control Photonic Networks

UvA SNER • Vrije Universiteit Amsterdam • Contact: Cees de Laat <delaat@science.uva.nl>

IBM

BOOTH #1205

Participatory Design Studio

Communications Research Centre Canada (CRC) • Carleton University Interactive Multimedia Studio (CIMS), Canada • National Research Council (NRC) of Canada • Contact: Michel Savoie <michel.savoie@crc.ca>

UCLP Graphical User Interface

CRC • CIMS • NRC • Contact: Michel Savoie <michel.savoie@crc.ca>

KISTI

BOOTH #1242

Streaming HDTV

KISTI (Korea Institute of Science and Technology Information) Supercomputing Center • Contact: Minsun Lee <mleeh@kisti.re.kr>

NASA

BOOTH #917

Uncompressed Real-Time High-Definition Streaming

NASA GSFC • DRAGON Project (Mid-Atlantic Crossroads, USC Information Sciences Institute East, George Mason University) • with SC06 Xnet, ADVA Networks, Internet2, and NICT/Osaka University • Contact: Pat Gary <Pat.Gary@nasa.gov>

NBCR-UCSD/OSAKA UNIVERSITY

BOOTH #439-443

UCSD National Biomedical Computation Resource (NBCR) and the CyberMedia Center at Osaka University, Japan, showcasing PRAGMA and NIH NRCC demonstrations.

GEO Grid: Global Earth Observation Grid

AIST GTRC • Contact: Naotaka Yamamoto <naotaka@ni.aist.go.jp>

NCHC Bioimaging and Environmental Observatories

National Center for High-Performance Computing (NCHC), Taiwan • Contact: Fang-Pang Lin <c00fpl00@nchc.org.tw>

Beyond Networks: Integrated Collaborative Cyberinfrastructure

UCSD NCMIR • Contact: Rajvikram Singh <raj@ncmir.ucsd.edu>

The NCMIR Multiscale Imaging Portal

UCSD NCMIR • Contact: Rajvikram Singh <raj@ncmir.ucsd.edu>

Python-based Molecular Viewing, Visual Programming, and Scalable Computing Environment

UCSD NBCR • Contact: Peter Arzberger <parzberg@ucsd.edu>

Rocks Based Tile Display Wall (TDW) and OptiPortal

UCSD San Diego Supercomputer Center (SDSC) • UCSD Calit2 • Contact: Phil Papadopoulos <phil@sdsc.edu>

BioGrid Project and BioGrid Kansai NPO

Osaka University • Contact: Shinji Shimojo <shimojo@cmc.osaka-u.ac.jp>

Status Report of JGN2 R&D and Future Direction

JGN2-Osaka • Contact: Shinji Shimojo <shimojo@cmc.osaka-u.ac.jp>

PRUIS and PRIME Joint Presentations

Osaka University • UCSD • Contacts: Susumu Date <date@ais.cmc.osaka-u.ac.jp>, Peter Arzberger <parzberg@ucsd.edu>

PACIFIC NORTHWEST GIGAPOP & RESEARCHCHANNEL

BOOTH #236

SAGE/OptiPutter Demonstration

University of Michigan, School of Info. • Contact: Erik Hofer <ehofer@umich.edu>

PURDUE UNIVERSITY

BOOTH #2214

SAGE/OptiPutter Demonstration

Purdue University, Envision Center for Data Perceptualization and Rosen Center for Advanced Computing • Contact: Laura Arns <larns@purdue.edu>

Technical Papers

High-Performance Dynamic Graphics Streaming for SAGE

Byungil Jeong, Luc Renambot, Ratko Jagodic, Rajvikram Singh, Julieta Aguilera, Andrew Johnson, Jason Leigh • UIC EVL • Contact: Byungil Jeong <bijeong@evl.uic.edu>

Posters

Semantics for Hybrid Networks Using the Network Description Language

Jeroen van der Ham, Paola Grosso, Freek Dijkstra, Cees de Laat, Ronald van der Pol, Andree Toonk • UvA SNER • SARA • Contact: Cees de Laat <delaat@science.uva.nl>

BOFs

Rocks Clusters

Steve Jones, Greg Bruno, Tim McIntire • UCSD SDSC • Contact: Phil Papadopoulos <phil@sdsc.edu>

OptiPutter @ SC06

Check SC06 conference schedule and individual booth schedules for presentation times.